Methods to Inhibit the Activity of Early Growth Response - 1 Protein (Egr-1) To Reduce Vascular Injury In a Subject

Abstract of the Disclosure

The invention provides a method for reducing damage to an ischemic tissue which comprises contacting cells of the tissue with an inhibitor of Early Growth Response Factor - 1 Protein (Egr-1). In addition, the invention provides a method for reducing vascular injury during reperfusion of an ischemic tissue in a subject which comprises contacting the tissue with a compound which inhibits expression of Early Growth Response Factor - 1 (Egr-1) protein in the tissue so as to reduce vascular injury in the tissue during reperfusion. wherein the inhibitor is a nucleic acid consisting essentially of the polynucleotide sequence 5'- CTTGGCCGCTGCCAT-3' (SEQ ID NO:1). In one embodiment of the invention, the subject has suffered a stroke, or a myocardial infarction. In another embodiment of the invention, the subject is undergoing or has undergone angioplasty, cardiac surgery, vascular surgery, or organ transplantation.